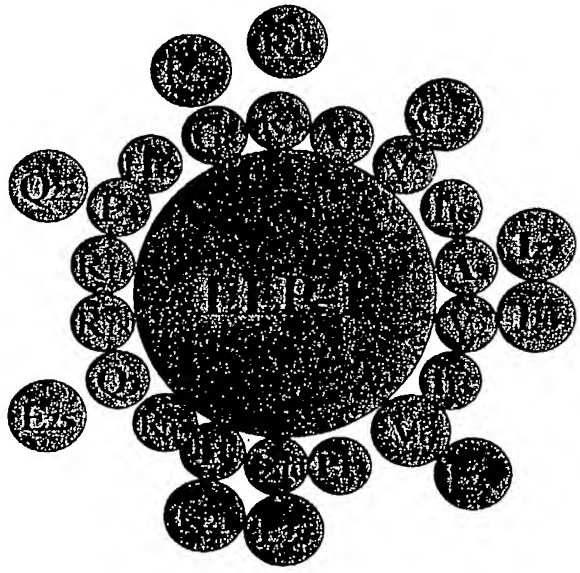
Figure 1

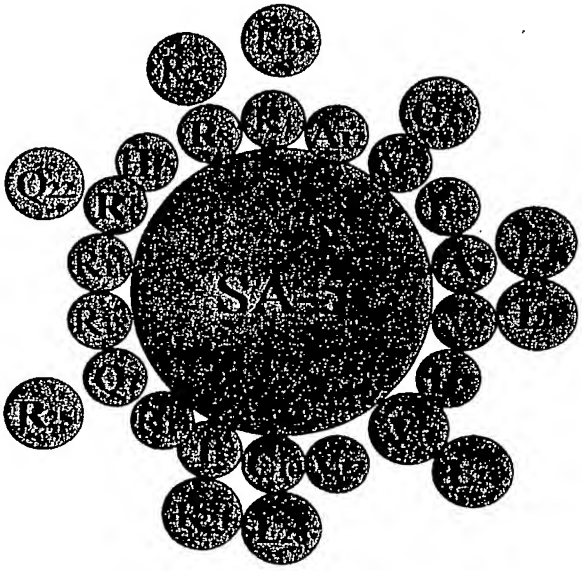
LLP1: R **VIEVVQGACRA IRHI PRRIRQGLER I L**

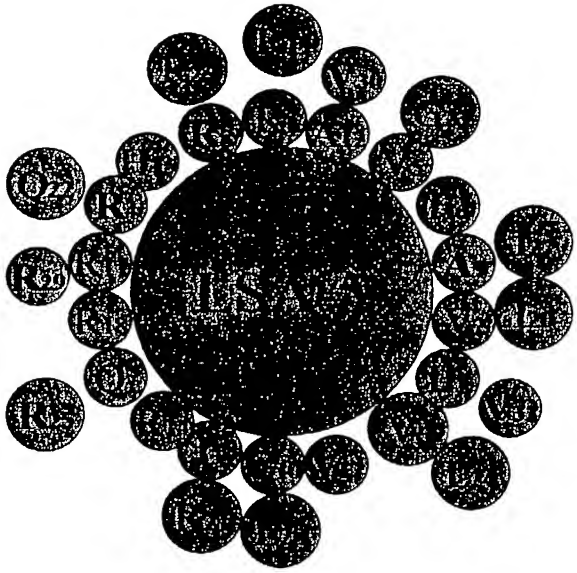
SA-5: R **VIRVVQRACRA IRHI VRRIRQGLRR I L**

LSA- 5: R **VIRVVQRACRA IRHI VRRIRQGLRR I LRVV**

WLSA5:R**WIRVVQRWCRAIRHIWRRIRQGLRRWLRVV**







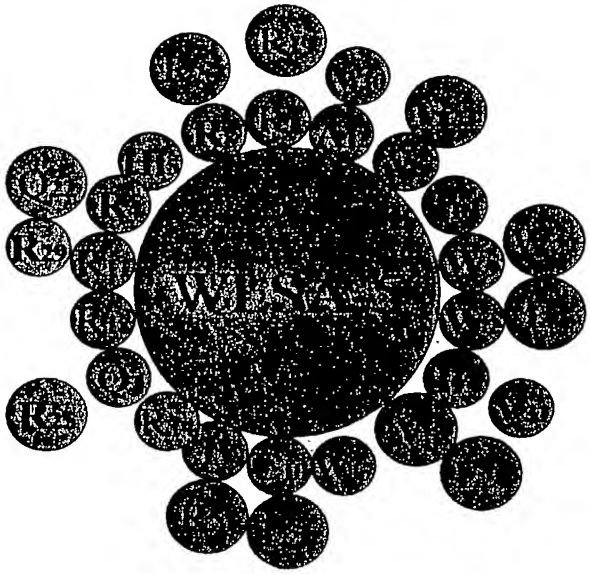
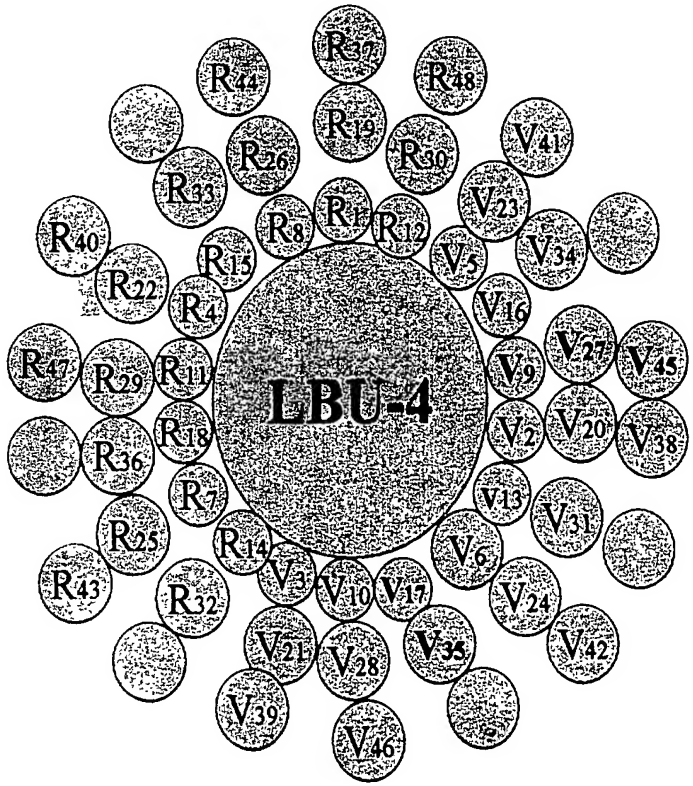


Figure 2

LBU-1	RVVRVVRRVVRR(SEQ ID NO:4)
LBU-2	RRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO: 5)
LBU-3	VRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO: 6)
LBU-3.5	RRVVRRVRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO:7)
LBU-4	RVVRVVRRVVRRVRRVVRRVVRVVRRVVRRVRRVVRRVVRVVRRVVRR (SEQ ID NO:8)
WLBU-1	RVVRVVRRWVRR (SEQ ID NO:9)
WLBU-2	RRWVRRVRRVWRRVVRVVRRWVRR (SEQ ID NO:10)
WLBU-3	VRRVWRRVVRVVRRWVRRVRRVWRRVVRVVRRWVRR (SEQ ID NO:11)
WLBU-4	RVVRVVRRWVRRVRRVWRRVVRVVRRWVRRVRRVWRRVVRVVRRWRVV (SEQ ID NO:12)



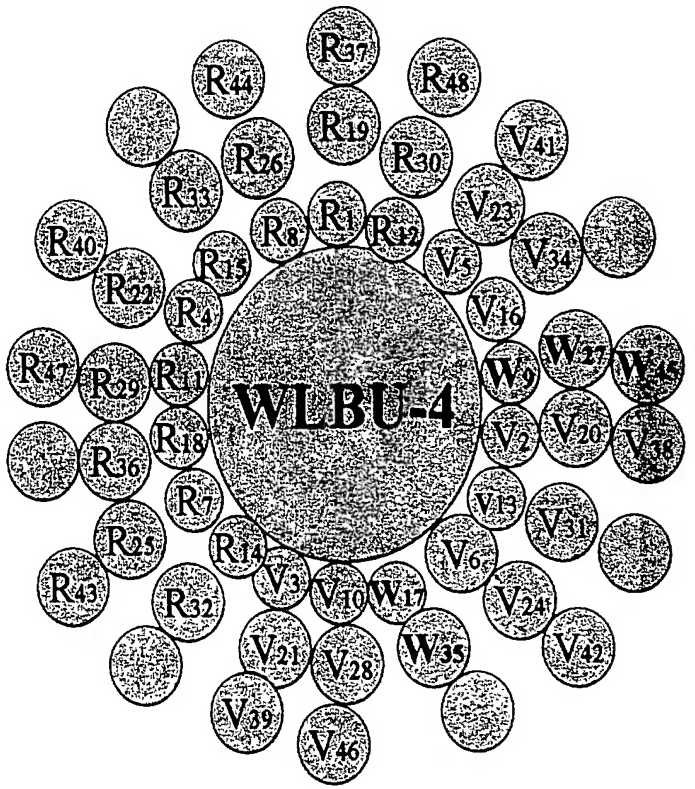


Figure 3. Killing of *P. aeruginosa* by LL37 & WLSA-5 in 10 mM PB

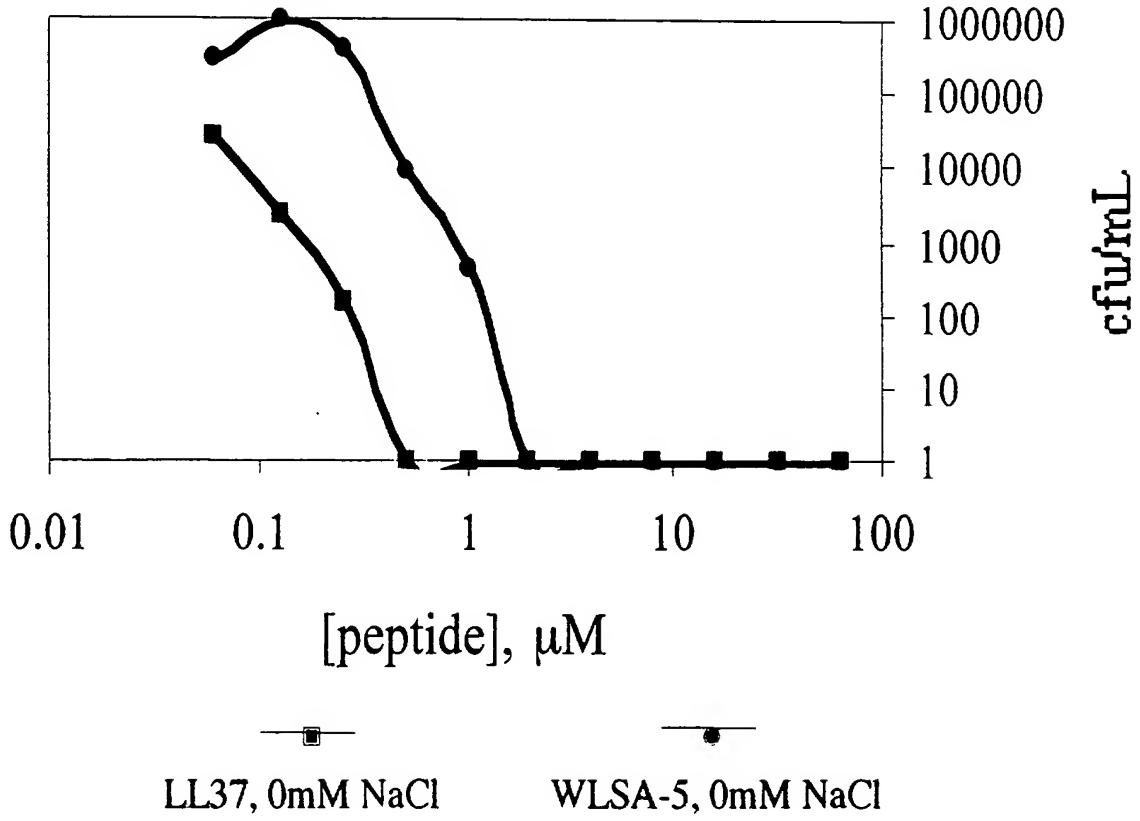


Figure 4. Killing of *S. aureus* by LL37 & WLSA-5 in 10 mM PB

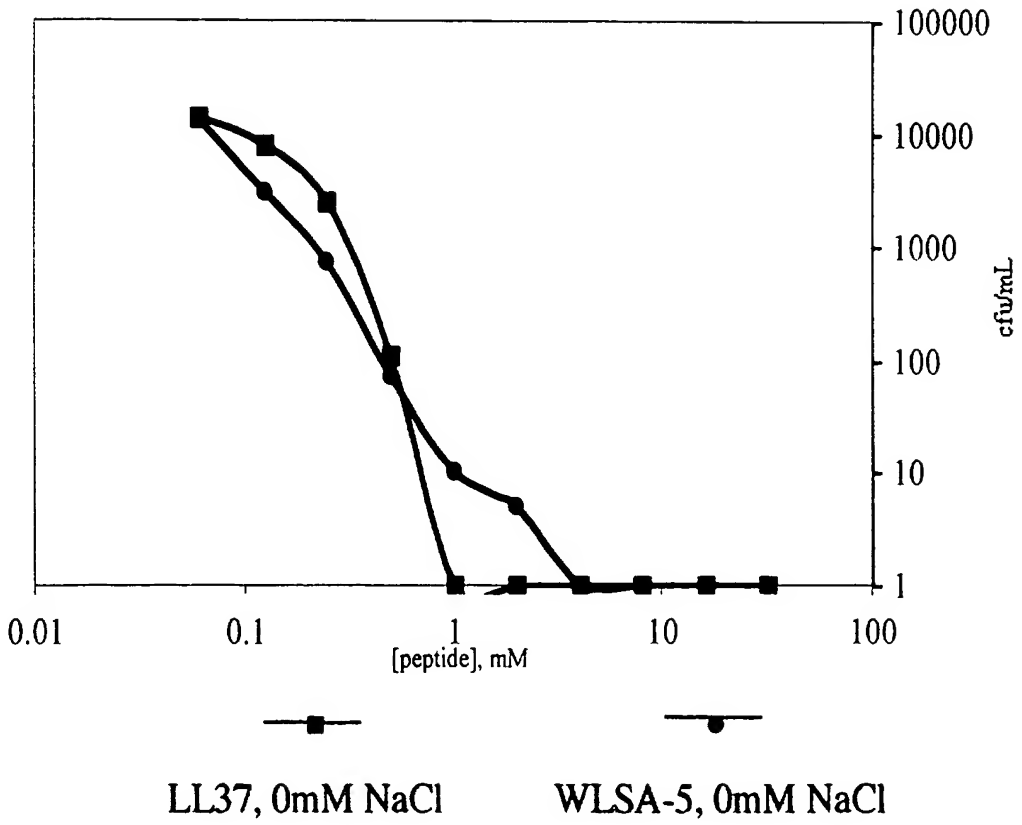


Figure 5. Killing of *P. aeruginosa* by LL37 & WLSA-5 in 10 mM PB plus 150 mM NaCl

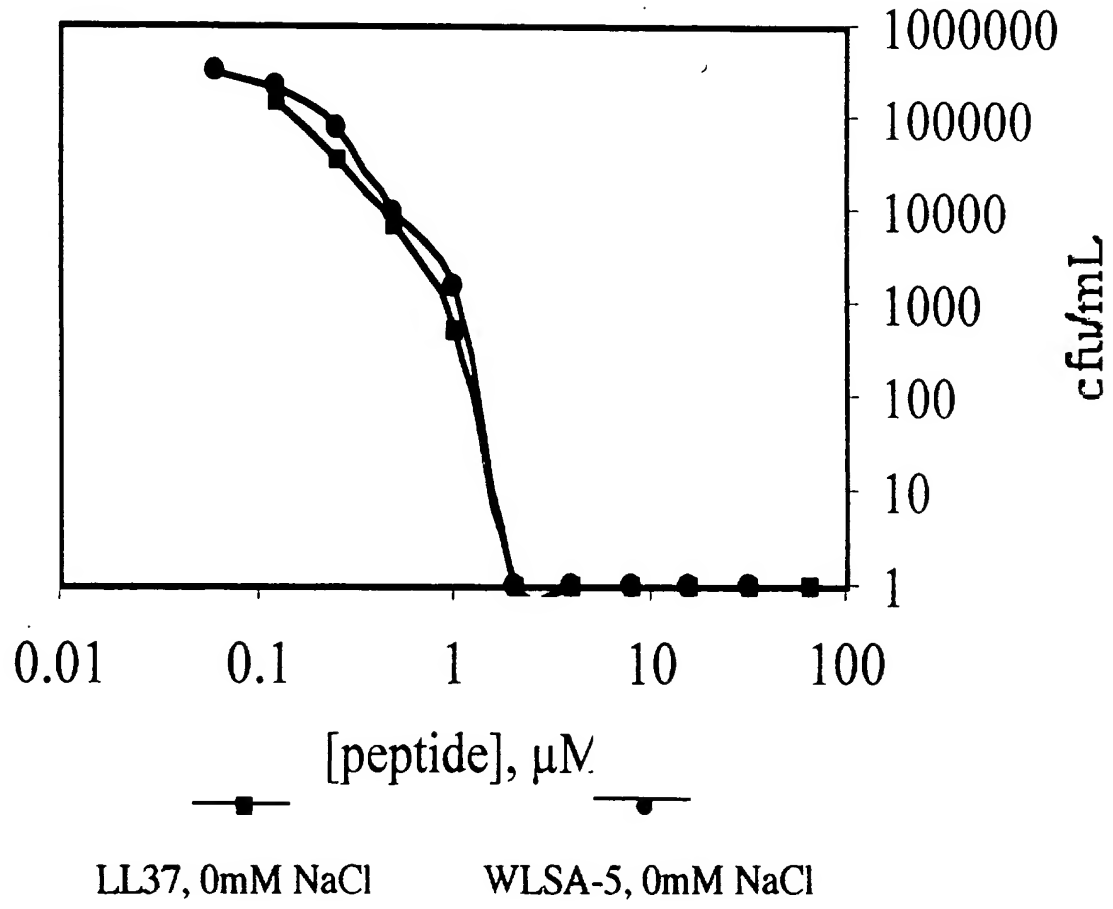


Figure 6. Killing of *S. aureus* by LL37 & WLSA-5 in 10 mM PB plus 150 mM NaCl

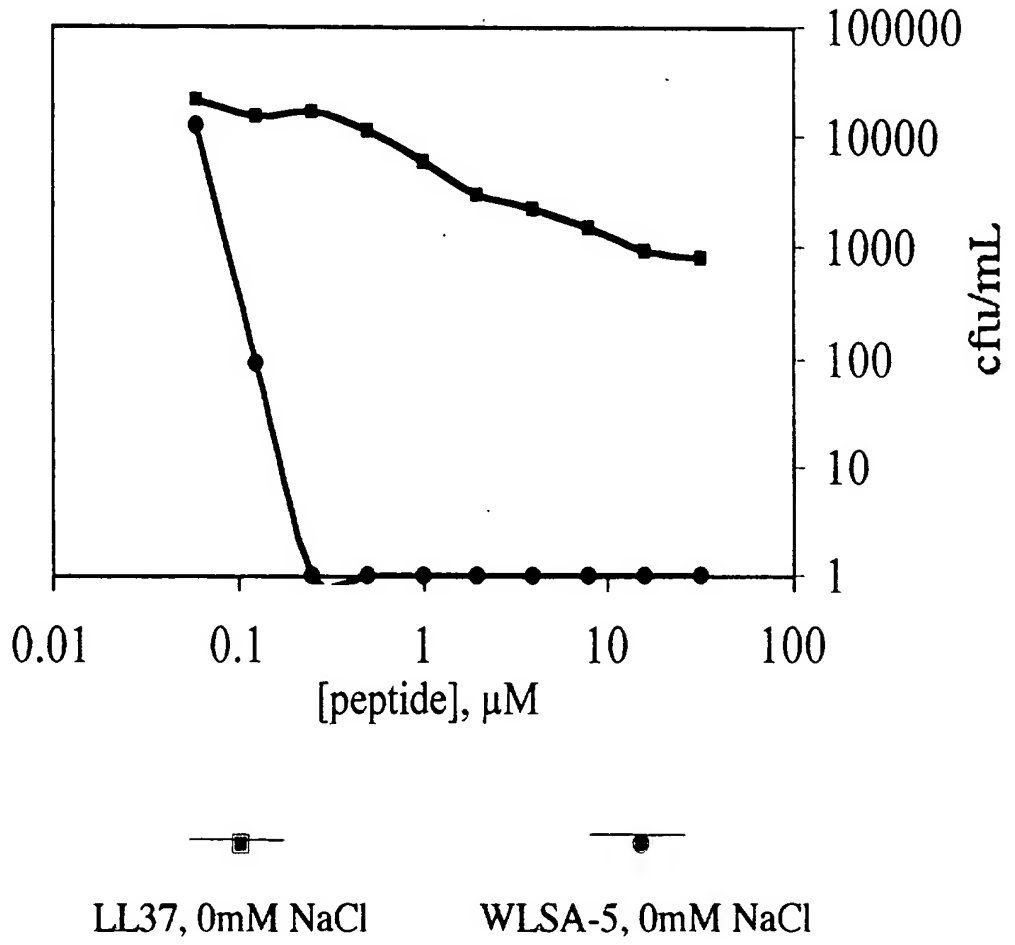


Figure 7. Activity of LSA-5 versus WLSA-5 against *Burkholderia cepacia*

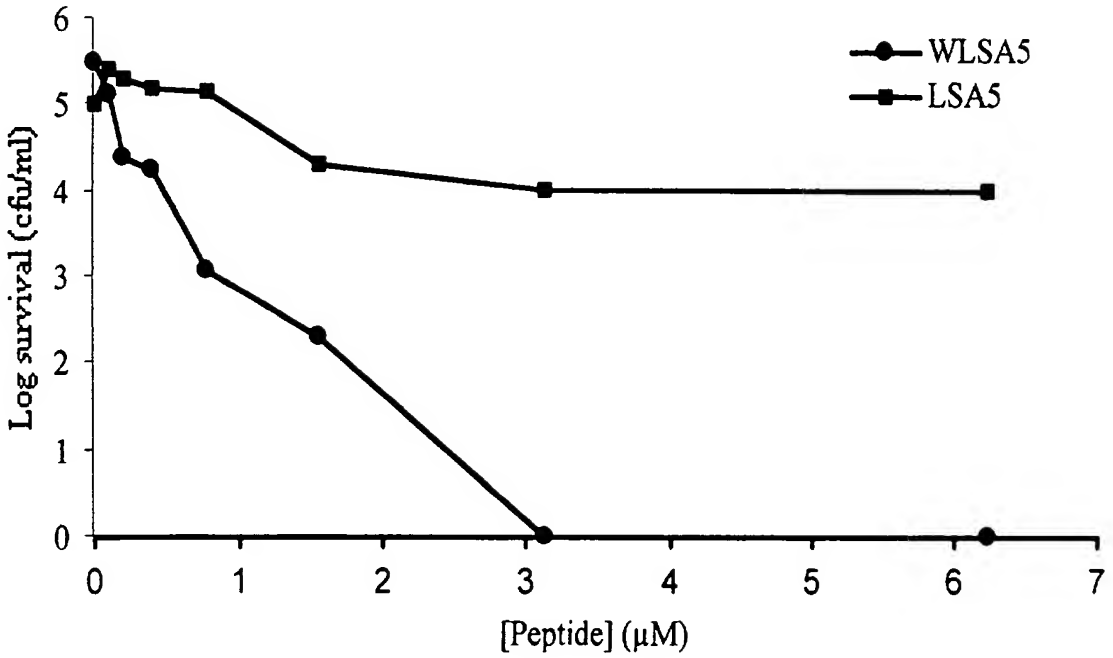


Figure 8. Antibacterial activity of WLSA-5 and the host derived LL37 against 10 different strains of *B. cepacia* representing multiple genomovars.

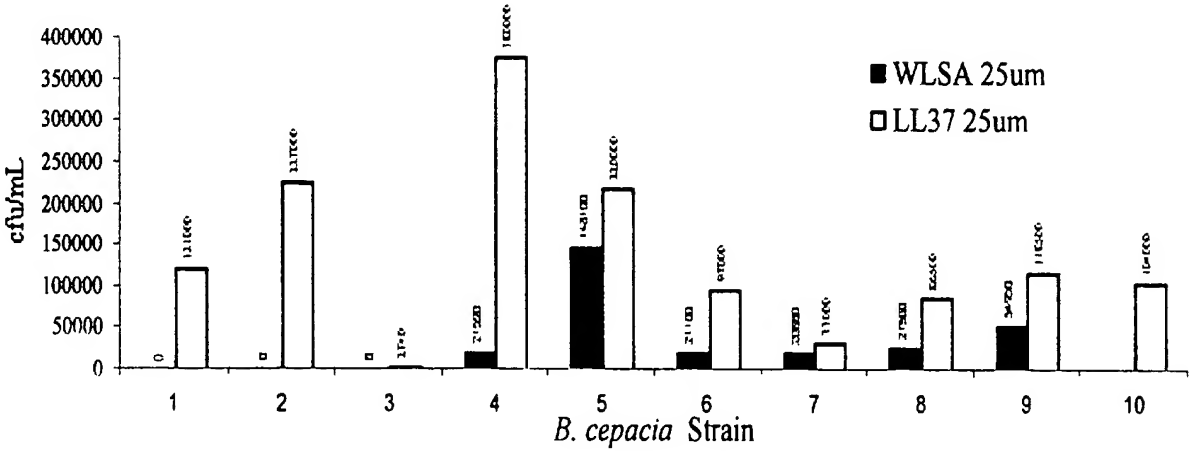


Figure 9. Selective toxicity of WLSA-5 for *P. aeruginosa* bound to CF human bronchial epithelial cells in culture

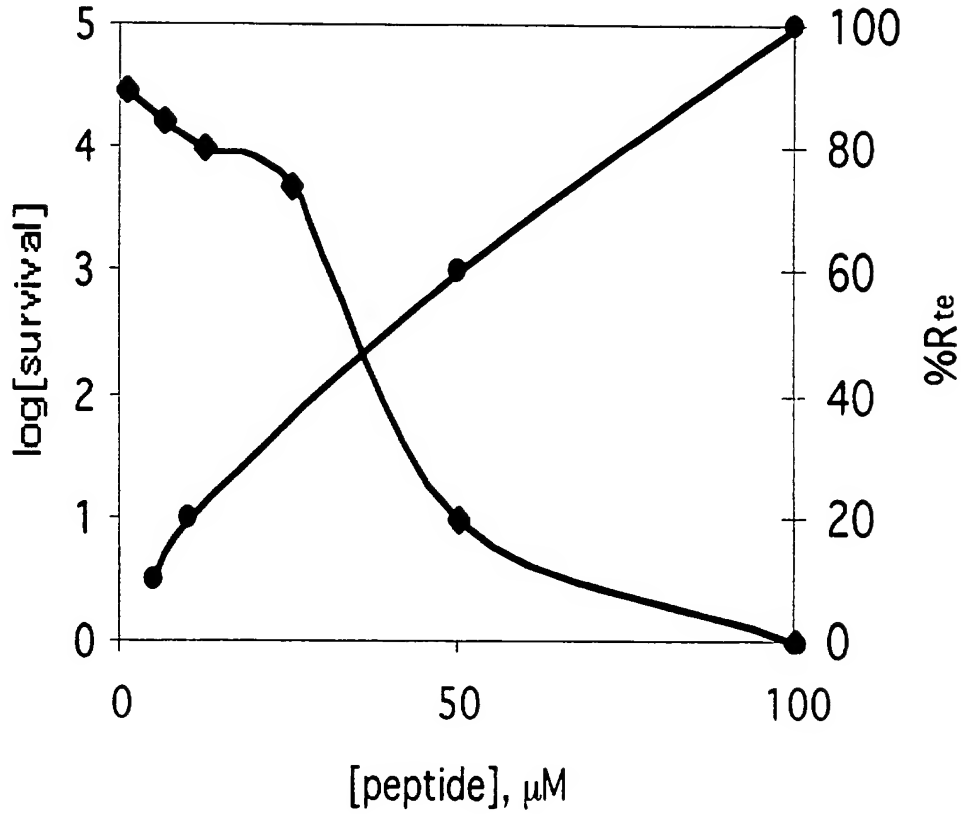


Figure 10. *In vitro* killing of *S. aureus* by WLSA-5 in synovial fluid

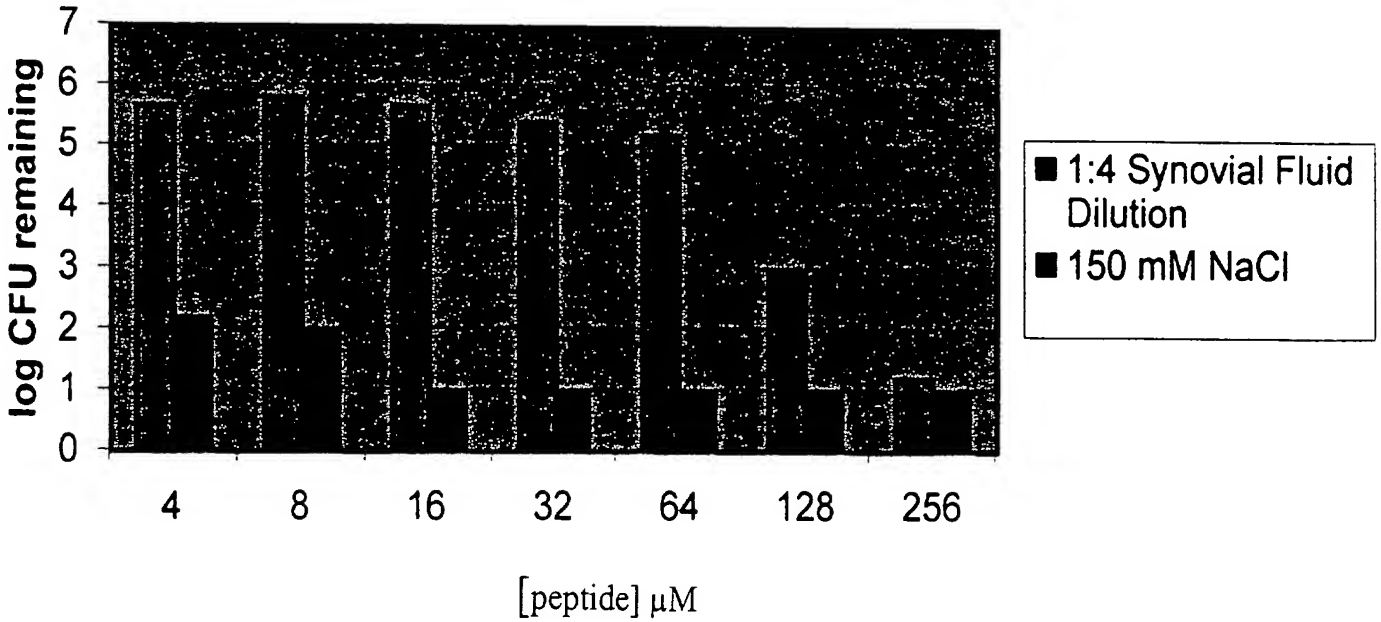


Figure 11. Dose dependent decrease in bacterial killing relative to the untreated control

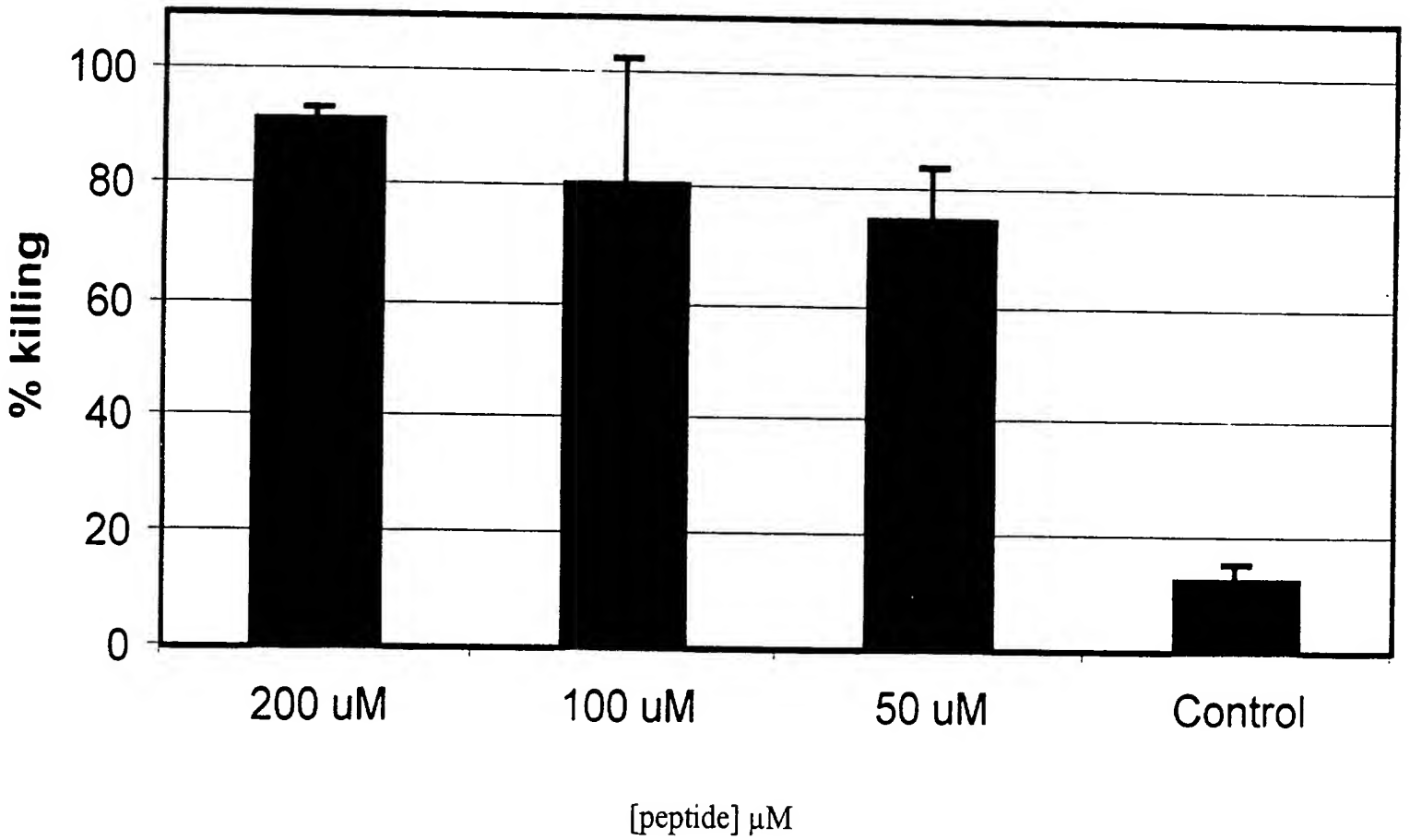
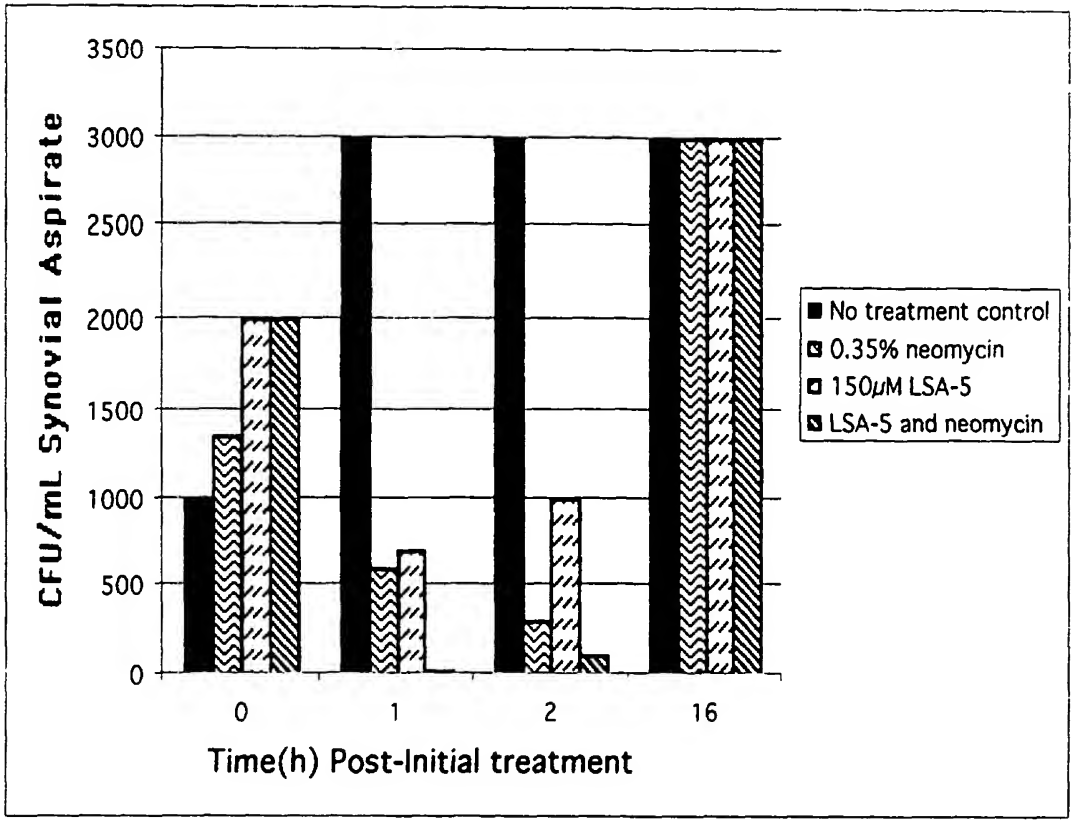


Figure 12. LSA-5/neomycin bacterial killing in rabbit joint model



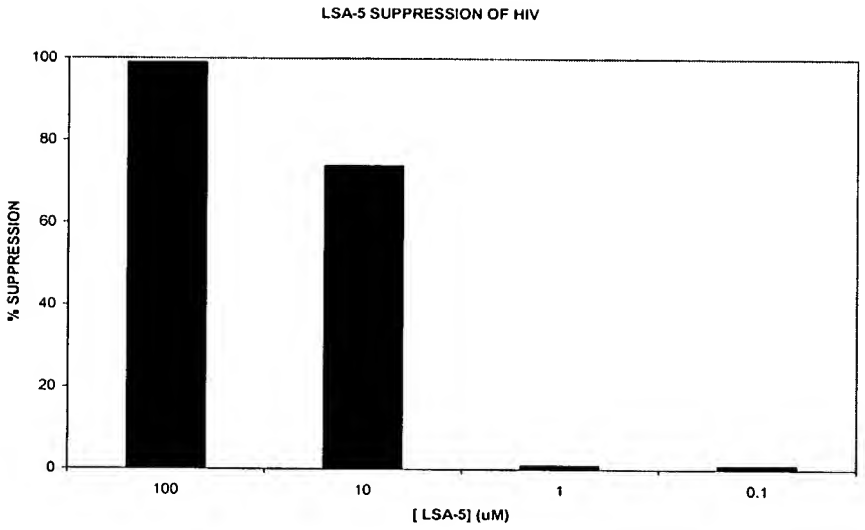

LSA-5 SUPPRESSION OF HIV
% SUPPRESSION
100
80
60
40
20
0
100
10
1
0.1
[LSA-5] (uM)

Figure 13